

#### Acuren Inspection

4566 Abrahamson Road Duluth, MN 55811

Phone: 218-722-5555 Cell: 262-649-7066 Fax: 218-722-5404

Materials Engineering & Testing

September 27, 2017

NRC Region III/Division of Nuclear Material Safety Division of Nuclear Materials Safety Aaron T. McCraw, Chief 2443 Warrenville Road Suite 210 Lisle, IL 60532

Re: Reply to a Notice of Violation License 22-27593-01 Docket No. 030-38913

Dear Mr. McCraw.

Acuren Inspection respectfully submits for your review the following documentation and explanation for the violation received on September 8, 2017.

Title 10 of the Code of Federal Regulations Section 30.50 (b) (2) requires, in part, the licensee notify the NRC within 24 hours after the discovery of any event in which equipment is disabled or fails to function as designed.

On June 29, 2017, Acuren Inspection Inc. failed to notify the NRC within the 24 hours after the discovery of an event that occurred on June 28, 2017, in which equipment was disabled and failed to function as designed, a period greater than 24 hours. Acuren Inspection Inc. notified the NRC on July 12, 2017, 14 days after the discovery of an event involving a stuck radiography source.

This violation was due to a lack of communication between the Corporate Director of Radiation Safety and the Regional Director of Radiation Safety. Without a clear procedure to identify the proper protocol and when this shall be followed is the initial reason for the lack of communication. Acuren Inspection Inc. has written the attached procedure to direct each of our Radiation Safety Officers, Regional Directors of Radiation Safety and the Corporate Director of Radiation Safety on the proper protocol everyone shall follow in the event of an incident. This procedure shall be reviewed with each of the Radiation Safety Officers during our monthly conference calls. When this step is completed the procedure shall be distributed to each office and it will be the Radiation Safety Officers responsibility to educate each Radiographer on the content and requirements each will follow in the case of a radiation incident. A sign-off sheet shall be used in each office to verify that each Radiographer has been educated in the process of incident reporting. This task shall be completed in 60 days after the NRC has reviewed and approved the attached procedure.

RECEIVED OCT 04 2017

If you have any other questions or comments please feel free to contact me at any time, either by email or by phone. I thank you for reviewing the attached information and hope we can continue to work together for a safe and more adequate program.

Respectfully,

Bruce F. Karie

Corporate Director of Radiation Safety

Acuren Inspection Inc.



# **Acuren Radiation Safety Incident Notification**

# **Incident and Report Training**

**ARS-IOP-5** 

**Revision 0** 

9/26/17

APPROVED BY:	DATE:
Bruce Karie	9/26/17
Acuren Director of Radiation Safety	

## **Table of Contents**

		Page #
1.0	Purpose	3
2.0	Scope	3
3.0	References	3
4.0	Responsibilities	3
5.0	Notification Protocol	3
6.0	Notification of Incidents	4
7.0	Reporting Requirements	5
8.0	Incident Report Data Requirements	6

Revision	Date	Author	Description
0	9/26/16	Bruce F Karie	Original
L	L		

#### 1.0 Purpose

1.1 This procedure will outline the plan of proper and timely incident reporting requirements. This procedure shall cover immediate incident reporting and twenty-four-hour reporting requirements. These requirements are mandated by both the NRC and Agreement States

#### 2.0 Scope

This internal operating procedure covers Acuren Inspection's proper process for reporting of any type of radiation incident.

#### 3.0 References

- 3.1 10 CFR 30.50 Reporting Requirements
- 3.2 10 CFR 34.101 Notifications
- 3.3 10 CFR 20.2202 Notifications of Incidents
- 3.4 ACUREN RADIOGRAPHIC OPERATION AND EMERGENCY MANUAL, current edition

### 4.0 Responsibilities

- 4.1 The Corporate Director of Radiation Safety is responsible for the development, implementation, and distribution of this procedure.
- 4.2 The Regional Directors of Radiation Safety, Regional and Facility Radiation Safety Officers are responsible for the implementation of this procedure.

#### 5.0 Notification Protocol

- 5.1 In the event of a radiation incident the following protocol shall be followed so that the proper Acuren Inspection personnel will be notified in a timely manner. This will in turn allow for the proper and timely reporting to the required regulatory agencies.
  - a. In the event a sealed source cannot be retracted to the fully secured position, the Radiographer shall keep all unauthorized personnel from the Radiation Restricted Area.
  - b. The Radiographer shall re-adjust the Radiation Restricted Area if necessary. Other qualified personnel may be enlisted to patrol the boundaries.
  - 5.1.2 The Radiographer, once the Radiation Restricted Area is secure, shall

ARS-IOP-5 Rev 0 3

- call by telephone, the Acuren Inspection Radiation Safety Officer for the division that is responsible for the project, to report the radiation incident.
- 5.1.3 The Radiographer shall obtain names, addresses, telephone numbers, and social security numbers for all personnel who may have been exposed to a dose in excess of Dose Limits.
- 5.1.4 The Radiation Safety Officer shall proceed to the incident site with the proper retrieval equipment. Once on site he shall receive an initial report of the incident from the Radiographer.
- 5.1.5 The Radiation Safety Officer shall now call the Regional Director of Radiation Safety to update him with a preliminary report of the incident.
- 5.1.6 The Regional Director of Radiation Safety shall on completion of the telephone conversation with the Radiation Safety Officer shall then notify the Corporate Director of Radiation Safety with a preliminary report.
- 5.1.7 On completion on the source retrieval the Radiation Officer shall compile all required report information. This information shall then be emailed to the Regional Director of Radiation Safety and Corporate Director of Radiation Safety. This information will then be used for the initial notification to the NRC.

#### 6.0 Notification of Incidents

- 6.1 Immediate Notifications
  - 6.1.1 The Corporate Director of Radiation Safety or the Assistant Director of Radiation Safety shall immediately report any event involving byproduct, source, or special nuclear material possessed by Acuren Inspection that may have caused or threatens to cause any of the following conditions.
    - a. An individual receives a total effective dose equivalent of 25 rems (0.25 Sv) or more.
    - b. A lens dose equivalent of 75 rems (0.75 Sv).
    - c. A shallow-dose equivalent to the skin or extremities of 250 rads (2.5) or more.
  - 6.1.2 The Corporate Director of Radiation Safety or the Assistant Director of Radiation Safety shall notify within 24 hours of discovery of the event,

ARS-IOP-5 Rev 0 4

report any event involving loss of control of licensed material possessed by Acuren Inspection that may cause or threatens to cause any of the following conditions.

- a. An individual to receive, in a period of 24 hours a total effective dose equivalent exceeding 5 rems (0.05Sv).
- b. An individual to receive, in a period of 24 hours a lens dose of equivalent exceeding 15 rems (0.15).
- c. An individual to receive, in a period of 24 hours a shallow-dose equivalent to the skin or extremities exceeding 50 rems (0.5 Sv).

#### 7.0 Reporting Requirements

#### 7.1 Immediate Report

7.1.1 The Corporate Director of Radiation Safety or Assistant Director of Radiation Safety shall notify the NRC as soon as possible but not later than 4 hours after the notification or discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation of radioactive materials that could exceed regulatory limits or release of licensed material that could exceed regulatory limits. (events may include fires, explosions, toxic gas releases, etc.)

#### 7.2 Twenty-Four Hour Reporting

- 7.2.1 The Corporate Director of Radiation Safety or the Assistant Director of Radiation Safety shall notify the NRC within 24 hours after the discovery of, or notification of any of the following events involving licensed material.
  - a. An unplanned contamination event that requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area.
  - b. An unplanned contamination event that involves a quantity of material greater than five times the lowest limit on intake specified in 10 CFR part 20 appendix B for the material.
  - c. An unplanned contamination event that has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.
- 7.2.2 An event in which equipment is disabled or fails to function as designed.

ARS-IOP-5 Rev 0 5

- a. The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits or to mitigate the consequences of an accident.
- b. The equipment is required to be available and operable when it is disable or fails to function.
- c. No redundant equipment is available and operable to perform the required safety function.
- 7.2.3 An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.
- 7.2.4 An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing Acuren Inspection's licensed material.
  - a. The quantity of material involves is greater than five times the lowest annual limit on intake specified in 10CFR part 20 appendix B for the material.
  - b. The damage affects the integrity of Acuren Inspection's material or container.

### 8.0 Incident Report Data Requirements

- 8.1 Acuren Inspection shall include the following information in each report submitted, and in each report of overexposure submitted which involves failure of safety components of radiography.
  - a. A description of the equipment problem.
  - b. The cause of the incident if known.
  - c. Name of the manufacturer and model number of the equipment involved in the incident.
  - d. Place, date, and time of the incident.
  - e. Actions taken to establish normal operations.
  - f. Corrective actions taken or planned to prevent recurrence.
  - g. Qualifications of personnel involved in the incident.